

FEB -2 2009

K082262

## LDR Spine ROI Interbody Fusion System

### 510(k) Summary of Safety and Effectiveness

|   |   |
|---|---|
| <b>SUBMITTED BY</b>                                   | LDR Spine USA<br>4030 W. Braker Lane, Suite 360<br>Austin, TX 78759   |
| <b>FOREIGN ESTABLISHMENT<br/>REGISTRATION NUMBER</b>  | 3004788213  |
| <b>US AGENT ESTABLISHMENT<br/>REGISTRATION NUMBER</b> | 3004903783  |
| <b>CONTACT PERSON</b>                                 | Noah Bartsch<br>Manager, Clinical, Regulatory and Quality Affairs<br>Phone: 512-344-3319<br>Fax: 512-344-3350                           |
| <b>DATE PREPARED</b>                                  | December 2, 2008  |
| <b>CLASSIFICATION NAME</b>                            | MAX 888.3080- Intervertebral Fusion Device with<br>Bone Graft, Lumbar<br>MQP 888.3060 - Spinal Intervertebral Body Fixation<br>Orthosis |
| <b>COMMON NAME</b>                                    | Intervertebral Body Fusion Device (MAX)<br>Spinal Vertebral Body Replacement Device (MQP)   |
| <b>PROPRIETARY NAME</b>                               | LDR Spine ROI Interbody Fusion System   |

### DEVICE DESCRIPTION

The proposed ROI Interbody Fusion System will be offered in two (2) configurations of various sizes. The configurations are designed based on surgical approach, and consist of: 1) ROI-T, transforaminal approach and 2) ROI-A, anterior approach.

### INDICATIONS:

When used as an intervertebral body fusion device, the ROI Interbody Fusion System is indicated for intervertebral body fusion of the lumbar spine, from L2 to S1, in skeletally mature patients who have had six months of non-operative treatment. The device is intended for use at either one level or two contiguous levels for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The device system is designed for use with supplemental fixation and with autograft to facilitate fusion.

When used as a vertebral body replacement device, The ROI System of implants is indicated for use to replace a vertebral body that has been resected or excised due to tumor or trauma/fracture. The device is intended for use as a partial vertebral body replacement in the thoracolumbar spine (from T1 to L5) and is intended for use with supplemental internal fixation. Supplemental internal fixation is required to properly utilize this system. These devices are intended to be used with autograft or allograft bone.

The ROI-A implants are intended to be implanted singularly while the ROI-T implants may be implanted singularly or in pairs.

#### **MECHANICAL TEST DATA**

Mechanical test results demonstrate that the proposed ROI Interbody Fusion System is substantially equivalent to the predicate device.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room - WO66-G609  
Silver Spring, MD 20993-0002

SEP 12 2011

LDR Spine USA  
% Mr. Noah Bartsch  
Manager, Clinical, Regulatory and Quality Affairs  
4030 W. Braker Lane, Suite 360  
Austin, Texas 78759

Re: K082262  
Trade/Device Name: LDR Spine ROI Interbody Fusion System  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Intervertebral body fusion device  
Regulatory Class: Class II  
Product Code: OVD, MAX, MQP  
Dated: December 2, 2008  
Received: December 4, 2008

Dear Mr. Bartsch:

This letter corrects our substantially equivalent letter of February 2, 2009.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other

Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to

<http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson". The signature is fluid and cursive, with the first name "Mark" being more prominent.

Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic,  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## INDICATIONS FOR USE

510(k) Number (if known): K082262

Device Name: LDR Spine ROI Interbody Fusion System

### Indications for Use:

When used as an intervertebral body fusion device, the ROI Interbody Fusion System is indicated for intervertebral body fusion of the lumbar spine, from L2 to S1, in skeletally mature patients who have had six months of non-operative treatment. The device is intended for use at either one level or two contiguous levels for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The device system is designed for use with supplemental fixation and with autograft to facilitate fusion.

When used as a vertebral body replacement device, The ROI System of implants is indicated for use to replace a vertebral body that has been resected or excised due to tumor or trauma/fracture. The device is intended for use as a partial vertebral body replacement in the thoracolumbar spine (from T1 to L5) and is intended for use with supplemental internal fixation. Supplemental internal fixation is required to properly utilize this system. These devices are intended to be used with autograft or allograft bone.

The ROI-A implants are intended to be implanted singularly while the ROI-T implants may be implanted singularly or in pairs.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use             
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

---

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)

Division of General, Restorative,  
and Neurological Devices

510(k) Number

K082262